Author Index

Canadian Journal of Animal Science, Volume 85, 2005

Aalhus, J.L., 327
Abrahamsen, M.S., 13
Adeola, O., 61
Adjiri-Awere, A., 117
Agabriel, J., **550**
Aich, P., 13
Alzon, M., 101
Ametaj, B.N., 157
Anil, L., 317
Anil, S.S., 317
Arana, A., 101
Aranda-Osorio, G., 521
Arthur, P.F., 281
Aulrich, K., 541

Babiuk, L.A., 13
Bach, S.J., 291
Bagg, R., 247
Balendran, A., 47
Barber, E.M., 537
Barioni, L.G., **550**
Baron, V.S., 501
Basarab, J.A., 501
Beauchemin, K.A., 75, 365, 377
Bedford, M.R., 61, 493
Begg, A.A., 13
Beitz, D.C., 165
Bequette, B.J., **548**
Bergen, R., 23, 463
Bergen, R.D., 177
Berry, R.J., 449
Berthiaume, R., 389, 417
Bettger, W.J., 409
Biagi, G., 345
Birkett, S.H., 269
Bobe, G., 165
Bøe, K.E., 301
Booth-McLean, M.E., 131
Boston, R.C., **546**
Bradford, B.J., 165
Brink, A.-L., 7
Broderick. G.A., 211
Brons, E., 243
Brûlé-Babel, A., 139, 309
Burns, J.C., 107

Cabral, S.L., **550**
Cant, J.P., 409
Capovilla, L.C., 413
Casadei, G., 345
Cavalieri, F.B., 413
Cervantes, M., 355
Chalupa, W., **546**
Cheng, K.M., 47
Chiquette, J., 389, 417
Chouinard, P.Y., 231
Christensen, C.R., 437
Christensen, D.A., 255, 437
Christopherson, R.J., 157, 177
Cook, S.R., 291
Corrigan, B.P., 1
Cortus, E.L., 537
Crompton, L.A., **549**
Crow, G., 139, 309, 449
Curtis, S.E., 1

de Lange, C.F.M., 269, 421
de Lange, K., 195
DeDecker, J.M., 1
Deen, J., 317
Delfa, R., 101
DeVinney, R., 291
Dick, P., 247
Dixon, W.T., 157
Drew, M.D., 185
Duffield, T.F., 247
Dupuis, M., 335

Eguinoa, P., 101
Einarson, M.S., 251
Ellis, J.L., **546**
Ellis, M., 1

Fan, B., 475
Fang, L., 291
Farmer, C., 37, 335
Faucitano, L., 37
Firkins, J.L., **545**
Ford, J.J., 205
Formaggioni, P., 93
Fortier, M.-È., 533
France, J., **545**, **546**, **548**, **549**
Frolich, A.A., 291

Garcia, F., **550**
Gariépy, C., 37
Garland, G.J., 111
Garossino, K.C., 401
Gatta, P.P., 345
Genswein, B.M.A., 401
Gervais, R., 231
Gibb, D.J., 223
Giguère, A., 533
Girard, C.L., 389, 417
Giritharan, G., 47
Glover, N.D., 177
Gong, J., 421
Gonyou, H.W., 537
Goonewardene, L.A., 69
Griebel, P.J., 13
Grunder, A.A., 455
Guo, J., **546**

Hall, M.B., **545**
Hanigan, M.D., **548**
He, J., 355
He, M.L., 75
Herd, R.M., 281
Hollis, G.R., 1
Horst, J.A., 413
Hristov, A.N., 211
Htoo, J.K., 355
Huntington, G.B., 107

Ivan, M., 75

Jalal, S., 13
Janz, J.A.M., 327
Jeppesen, L.L., 7

Karnati, S.K.R., **545**
Kaufman, C., 355
Kaushik, R.S., 13
Kebreab, E., **545**, **546**
Kennedy, A.D., 139, 177, 309
Klindt, J., 205
Koenig, K.M., 365, 377
Kohn, R.A., **546**

Laarveld, B., 185
Laforest, J.P., **547**
Larriesstra, A., 317
Lean, I.J., **546**
Leeson, S., 195
Lemay, S.P., 537
Léonard, M., 231
Lessard, M., 335
Lewis, N.J., 449
Li, K., 475
Liu, B., 475
Lomax, M.A., **549**
Longo, C., **550**
Loveday, D.M., 85
Lu, Y., 165
Luchansky, J.B., 345
Lunn, D.E., 247

Page numbers in **bold** refer to abstracts.

Lyle, K., 501
Lysyk, T.J., 111

Mabjeesh, S.J., **548**
MacRae, J.C., **548**
Magee, K.J., 107
Majak, W., 111
Malacarne, M., 93
Mandell, I.B., 23
Marcoux, M., 481
Mariani, P., 93
Martineau, R., 389
Marx, T., 501
Matsushita, M., 413
Matte, J.J., 389, 417, 533
McAllister, T.A., 131, 211, 223, 291, 401, 521, 541
McBride, B.W., 247, 409
McKinnon, J.J., 85, 255, 437, 521
McNabb, W.C., **548**
McPhee, M.J., **551**
Mears, G.J., 131
Mejdell, C.M., 301
Mendizabal, J.A., 101
Miller, S.P., 23, 145, 463
Milligan, D.N., 401
Mir, P.S., 75, 223
Mir, Z., 75
Moate, P.J., **546**
Murdoch, G.K., 157
Mustafa, A.F., 389, 417
Mutsvangwa, T., 247, 409

Nafikov, R.A., 165
Newkirk, R.W., 53
Nyachoti, C.M., 405

Odongo, N.E., 247, 409
Okine, E.K., 69, 157, 501
Olkowski, A.A., 521
Olson, K.C., 69
Olson, M.E., 111, 401
Oltjen, J.W., **550**, **551**
Onyango, E.M., 61
Ouellet, D.R., 211

Patience, J.F., 405
Peña-Ortega, L., 195
Petit, H.V., 413
Pietrasik, Z., 327
Piva, A., 345
Plaizier, J.C., 243, 251
Pomar, C., 37, 481, **547**
Poore, M.H., 107
Potter, A.A., 13
Purroy, A., 101

Rademacher, M., 355
Rafuse, J.L., 493
Rajamahendran, R., 47
Ralston, B.J., 401
Ramakrishnappa, N., 47
Ramos, F.S., 413
Ramsey, P., 501
Rasali, D.P., 139, 309
Rawlyk, N.A., 13
Reuter, T., 541
Reveneau, C., **545**
Richards, J.D., 421
Rigolon, L.P., 413
Rivest, J., **547**
Robertson, W.M., 23
Roque, A.P., **550**
Rosen, G.D., **547**
Rymph, S.J., **545**

Sainz, R.D., **550**, **551**
Santos, G.T., 413
Santschi, D.E., 389, 417
Sauer, W.C., 355
Schenkel, F.S., 145
Schnäckel, W., 541
Schwartzkopf-Genswein, K.S., 131
Seddon, I.R., 405
Shah, M.A., 223
Shand, P.J., 327
Shore, K.V., 409
Shrestha, J.N.B., 139, 309, 455
Silva, D., 413
Silversides, F.G., 493
Simmins, P.H., 493
Small, J.A., 177
Soita, H.W., 437
Soret, B., 101
Souza Dias, R., **550**
Spratt, R., 231
Stevenson, S.M.L., 291
Stonecipher, C., 69
St-Pierre, N.R., **545**
Summer, A., 93
Sylvester, J.T., **545**

Thacker, P.A., 53, 85
Thomason, J., **546**
Tirelli, A., 93

Urdaneta-Rincon, M., 195

Van Kessel, A., 185, 521
Van Lunen, T.A., 117
Vessie, G., 247
Vitti, D.M.S.S., **550**
Wamnes, S., 449
Wang, Y., 145
Wang, Y.F., 475
White, L.J., 185
Widowski, T.M., 409
Wiedmeier, R.D., 69
Wilkie, D.C., 185
Wilson, D.G., 85
Wilson, H.L., 7
Wilton, J.W., 145, 463
Wittenberg, K.M., 251
Wolter, B.F., 1

Xiong, T.A., 475

Yang, J., 475
Yen, J.T., 205
Young, J.W., 165
Yu, M., 475
Yu, P., 255, 437, 513

Zhang, Y., 355
Zhu, M.J., 475
Ziegler, K., 501
ZoBell, D.R., 69

Subject Index

Canadian Journal of Animal Science, Volume 85, 2005

Abdominal and intestinal fat
  evaluation of geese, 455
Acrosome reaction
  in vitro tests and bull fertility, 47
Acute phase response
  acute phase response and fatty liver, 165
Adipocyte size
  lipogenic activity in ewes, 101
Adipose tissue
  lipogenic activity in ewes, 101
Agricultural byproducts
  wheat straw and middlings ensiled with whey, 69
Alfalfa hay, chopped
  replacing chopped hay with silage in total mixed rations, 251
Alfalfa silage
  replacing chopped hay with silage in total mixed rations, 251
Alfasure™
  efficacy of Alfasure™ in treating bloat in cattle, 111
Allantoin
  purines and ^{15}N as microbial markers, 211
Amino acid, **548**
  amino acids and necrotic enteritis in broiler chickens, 185
  rice bran in diets for growing pigs, 355
Angus, Canadian
  genetic parameters in Canadian Angus cattle, 309
Anionic salts
  anionic salts and vitamin D_3 on Ca homeostasis, 521
ANKOM DAISY^{II} incubator
  in vitro dry matter digestibility of ruminant feeds, 243
Apparent metabolizable energy
  broilers fed maritime wheat, 493
Antibiotic
  subtherapeutic use of antibiotics in pork production, 117
Association analysis
  variation and association analysis of *PSMC3*, *PSMC6* and *PSMD3*, 475
B vitamins
  B vitamins in ruminal fluid of dairy cows, 417
  B vitamins in ruminal fractions of dairy cows, 389
Barley
  corn gluten feed for feedlot cattle, 365
  protein supplementation of feedlot cattle diets, 377
Beef
  hemp seed for feedlot cattle, 223
  nitrogen metabolism in steers, 107
Beef bulls
  predicting lean meat yield using alternate ultrasound measurements, 23
Beef carcass
  genetic correlations among beef carcass indicator traits, 463
Beef cattle
  Angus cattle stayability and growth, 139
  genetic parameters in Canadian Angus cattle, 309
Beef heifers
  cold exposure on body temperature and heat production of cattle, 177
Beef semitendinosus
  semitendinosus injection treatments, 327
Beef tenderness, **550**, **551**
  anionic salts and vitamin D_3 on Ca homeostasis, 521
Behaviour
  behaviour of mink in the lactation period, 7
  responses of horses to winter climate, 301
  stress response, claves, management, 131
Biological samples
  selenium determination in biological samples, 533
Biometrical analysis, **547**
Biting force, **547**
Bloat, frothy
  efficacy of Alfasure™ in treating bloat in cattle, 111
Body condition score
  lipogenic activity in ewes, 101
Body protein and fat, **550**
Body weights
  evaluation of geese, 455
Bovine
  gene expression in intestinal "loops", 13
Breeding failure
  seasonality of reproduction in sows, 317
Broiler chick
  residual phytase activity in the digestive tract, 61
Broiler chicken
  amino acids and necrotic enteritis in broiler chickens, 185
  lysine requirements of broilers, 195
Broiler performance
  broilers fed maritime wheat, 493
Bromocriptine
  prolactin and immunity in gravid gilts and foetuses, 335

Calcium, **550**
Calcium homeostasis
  anionic salts and vitamin D_3 on Ca homeostasis, 521
Calf
  individual free choice creep feed intake by calves, 401
Calf, dairy
  stress response, claves, management, 131
Calving traits
  genetic parameters in Canadian Angus cattle, 309
Canadian Angus
  genetic parameters in Canadian Angus cattle, 309
Canis familiaris, **547**
Canola meal
  non-toasted canola meal for swine, 53
Capteur gras maigre
  accuracy of backfat and muscle thickness measurements, 481
Carcass
  non-toasted canola meal for swine, 53
Carcass characteristics
  gestational growth hormone-releasing factor treatment and pork carcass and meat quality, 37
Carcass composition
  predicting lean meat yield using

Page numbers in **bold** refer to abstracts.

alternate ultrasound measurements, 23
Carcass grading
accuracy of backfat and muscle thickness measurements, 481
Castration
stress response, claves, management, 131
Cattle
Angus cattle stayability and growth, 139
corn gluten feed for feedlot cattle, 365
genetic parameters in Canadian Angus cattle, 309
methane emissions from Alberta's beef cattle, 501
mobile nylon bag technique for cattle, 85
protein supplementation of feedlot cattle diets, 377
purines and ^{15}N as microbial markers, 211
Cattle, feedlot
corn gluten feed for feedlot cattle, 365
protein supplementation of feedlot cattle diets, 377
Cattle, growing
wheat straw and middlings ensiled with whey, 69
Cecum
lactitol and lactic acid bacteria in pigs, 345
Chinese strain
evaluation of geese, 455
Chopped alfalfa hay
replacing chopped hay with silage in total mixed rations, 251
Clostridium perfringens
amino acids and necrotic enteritis in broiler chickens, 185
Cold, acute
bovine messenger ribonucleic acid abundance, 157
Cold duration
cold-exposure on body temperature and heat production of cattle, 177
Conjugated linoleic acid
conjugated linolenic acid in dairy cows under commercial conditions, 231
hemp seed for feedlot cattle, 223
sunflower seeds increase conjugated linoleic acid content of milk, 75
Continuous culture, **546**
Copper proteinate
copper proteinate for sows, 205
Corn
corn gluten feed for feedlot cattle, 365
protein supplementation of feedlot cattle diets, 377
Corn gluten feed
corn gluten feed for feedlot cattle, 365
Cortisol
stress response, claves, management, 131
Cow
sunflower seeds increase conjugated linoleic acid content of milk, 75
Cow, dairy **546**
acute phase response and fatty liver, 165
B vitamins in ruminal fluid of dairy cows, 417
B vitamins in ruminal fractions of dairy cows, 389
modelling nutrient supply to dairy cattle from a feedstuff, 513
monensin on meal frequency in dairy cows, 247
P status of dairy cows, 409
Cow, perparturient, **546**
CPM-Dairy, **546**
Creep feed
individual free choice creep feed intake by calves, 401
Crop residue
wheat straw and middlings ensiled with whey, 69
Cy-dye fluorescence
gene expression in intestinal "loops", 13

D vitamin
anionic salts and vitamin D_3 on Ca homeostasis, 521
Dairy calf
stress response, claves, management, 131
Dairy cow, **546**
acute phase response and fatty liver, 165
B vitamins in ruminal fluid of dairy cows, 417
B vitamins in ruminal fractions of dairy cows, 389
modelling nutrient supply to dairy cattle from a feedstuff, 513
monensin on meal frequency in dairy cows, 247
P status of dairy cows, 409
Davis growth model, **550**, **551**
Dehorning
stress response, claves, management, 131
Digestibility
non-toasted canola meal for swine, 53
rice bran in diets for growing pigs, 355
wheat straw and middlings ensiled with whey, 69
Digestible energy
energy content in swine and poultry feed, 269

Early weaning
transport of early-weaned piglets, 449
Economic benefit
efficiency of feed utilization, 281
Egg-yolk IgY
oral anti-*E. coli* 0157:H7 antibodies for sheep, 291
Elastase
semitendinosus injection treatments, 327
Embden strain
evaluation of geese, 455
Energetics
energy content in swine and poultry feed, 269
Energy
energy content in swine and poultry feed, 269
rice bran in diets for growing pigs, 355
Enteric fermentation
methane emissions from Alberta's beef cattle, 501
Enteritis, necrotic
amino acids and necrotic enteritis in broiler chickens, 185
Environment
cold-exposure on body temperature and heat production of cattle, 177
Environmental sustainability
efficiency of feed utilization, 281
Enzyme
broilers fed maritime wheat, 493
semitendinosus injection treatments, 327
Escherichia coli 0157:H7
oral anti-*E. coli* 0157:H7 antibodies for sheep, 291
Escherichia coli phytase
residual phytase activity in the digestive tract, 61
Ewe
lipogenic activity in ewes, 101
Exogenous phytases, **548**

Faecal shedding
oral anti-*E coli* 0157:H7 antibodies for sheep, 291
Fat, abdominal and intestinal
evaluation of geese, 455
Fat, body protein and, **550**
Fat model, **546**
Fat supplement
fat supplements for dairy cows, 413
Fat distribution, **551**
Fatty acid
fat supplements for dairy cows, 413
Fatty liver
acute phase response and fatty liver, 165
Feed analysis, **545**
Feed efficiency
efficiency of feed utilization, 281
Feed ingredients
energy content in swine and poultry feed, 269
Feed intake
replacing chopped hay with silage in total mixed rations, 251
Feed restriction, acute
bovine messenger ribonucleic acid abundance, 157
Feed supplement
efficacy of Alfasure™ in treating bloat in cattle, 111
Feeding behaviour
individual free choice creep feed intake by calves, 401
Feedlot cattle
corn gluten feed for feedlot cattle, 365
protein supplementation of feedlot cattle diets, 377
Fertility assay
in vitro tests and bull fertility, 47
Fertilization, in vitro
in vitro tests and bull fertility, 47
Ferulic acid
hydroxycinnamic acids, ferulic acid esterase and plant cell wall biodegradation, 255
Feruloyl esterase
hydroxycinnamic acids, ferulic acid esterase and plant cell wall biodegradation, 255
Feruloyl-polysaccharides
hydroxycinnamic acids, ferulic acid esterase and plant cell wall biodegradation, 255
Field fertility
in vitro tests and bull fertility, 47
Finishing
stocking rate in wean-to-finish, 1
Flaxseed
fat supplements for dairy cows, 413
protein secondary structures in flaxseeds, 437
Food
detection of feed-ingested plant DNA in meat, 541
Food mastication, **547**
Forage
in vitro dry matter digestibility of ruminant feeds, 243
Forage to concentrate ratio
B vitamins in ruminal fractions of dairy cows, 389
Frequency of AI
seasonality of reproduction in sows, 317
Frothy bloat
efficacy of Alfasure™ in treating bloat in cattle, 111
Fourier transform infrared microspectrosopy
protein secondary structures in flaxseeds, 437
Full-fat oilseed
hemp seed for feedlot cattle, 223

Gammon
detection of feed-ingested plant DNA in meat, 541
Gastrointestinal tract
gastrointestinal microbiota in monogastrics, 421
Genetic correlation
Angus cattle stayability and growth, 139
genetic correlations among beef carcass indicator traits, 463
Genetic parameters
genetic parameters in Canadian Angus cattle, 309
Genetically modified organism
detection of feed-ingested plant DNA in meat, 541
Genetics
efficiency of feed utilization, 281
Gibbs sampling
comparison of models evaluating calving ease, 145
Gilt, gestating
gestational growth hormone-releasing factor treatment and pork carcass and meat quality, 37
Glucose metabolism, **546**
Glycine
amino acids and necrotic enteritis in broiler chickens, 185
Goat, **548**
Goose
evaluation of geese, 455
Grading probes
accuracy of backfat and muscle thickness measurements, 481
Grain
corn gluten feed for feedlot cattle, 365
in vitro dry matter digestibility of ruminant feeds, 243
Greenhouse gas
methane emissions from Alberta's beef cattle, 501
Grower-finisher pigs
urination frequency of pigs, 537
Growing cattle
wheat straw and middlings ensiled with whey, 69
Growth
gestational growth hormone-releasing factor treatment and pork carcass and meat quality, 37
protein supplementation of feedlot cattle diets, 377
Growth hormone releasing factor
gestational growth hormone-releasing factor treatment and pork carcass and meat quality, 37
Growth, juvenile
genetic parameters in Canadian Angus cattle, 309
Growth traits
Angus cattle stayability and growth, 139

Heart rate
stress response, claves, management, 131
Heat production
cold-exposure on body temperature and heat production of cattle, 177
Hemp seed
hemp seed for feedlot cattle, 223
Hennessy Grading Probe 2
accuracy of backfat and muscle thickness measurements, 481
Heritability
Angus cattle stayability and growth, 139
genetic correlations among beef carcass indicator traits, 463
Heterosis
comparison of models evaluating calving ease, 145
Hindlimb protein turnover, **549**
Holo-analysis, **548**
Horse
responses of horses to winter climate, 301

Hull
nitrogen metabolism in steers, 107
Hydroxycinnamic acid
hydroxycinnamic acids, ferulic acid esterase and plant cell wall biodegradation, 255

Immunity
prolactin and immunity in gravid gilts and foetuses, 335
Immunohistochemistry
gene expression in intestinal "loops", 13
Immunotherapy
oral anti-*E. coli* 0157:H7 antibodies for sheep, 291
Intake
individual free choice creep feed intake by calves, 401
Interaction effects
hydroxycinnamic acids, ferulic acid esterase and plant cell wall biodegradation, 255
Intestinal nutrient availability
mobile nylon bag technique for cattle, 85
Intestine
gene expression in intestinal "loops", 13
Intrinsic structural matrix
protein secondary structures in flaxseeds, 437
In vitro dry matter digestibility
in vitro dry matter digestibility of ruminant feeds, 243
In vitro fertilization
in vitro tests and bull fertility, 47

Juvenile growth
genetic parameters in Canadian Angus cattle, 309

Kinetics, **548**

Lactation
P status of dairy cows, 409
Lactation stage
mare milk proteins during lactation, 93
Lactitol
lactitol and lactic acid bacteria in pigs, 345
Lamb, **549**
Leptin
bovine messenger ribonucleic acid abundance, 157
Leptin receptor
bovine messenger ribonucleic acid abundance, 157
Linoleic acid, conjugated
conjugated linolenic acid in dairy cows under commercial conditions, 231
hemp seed for feedlot cattle, 223
sunflower seeds increase conjugated linoleic acid content of milk, 75
Lipid metabolism, **546**
Lipogenic enzyme activity
lipogenic activity in ewes, 101
Lysine requirement, **547**
lysine requirements of broilers, 195

Maize
detection of feed-ingested plant DNA in meat, 541
Mammary model, **548**
Mare's milk
mare milk proteins during lactation, 93
Meal frequency
monensin on meal frequency in dairy cows, 247
Meat quality traits
gestational growth hormone releasing factor treatment and pork carcass and meat quality, 37
Mechanistic model, **546**
MecSic, **550**
Medicago sativa L.
efficacy of Alfasure™ in treating bloat in cattle, 111
Metabolism
nitrogen metabolism in steers, 107
Metabolism model, **550**
Metabolizable energy
broilers fed maritime wheat, 493
energy content in swine and poultry feed, 269
Methane
methane emissions from Alberta's beef cattle, 501
Microarray
gene expression in intestinal "loops", 13
Microbial protein synthesis
purines and ^{15}N as microbial markers, 211
Microbiota
gastrointestinal microbiota in monogastrics, 421
Microflora
gene expression in intestinal "loops", 13
Milk
sunflower seeds increase conjugated linoleic acid content of milk, 75
Milk fat
conjugated linolenic acid in dairy cows under commercial conditions, 231
Milk production
replacing chopped hay with silage in total mixed rations, 251
Mink dam
behaviour of mink in the lactation period, 7
Mink kit
behaviour of mink in the lactation period, 7
Mobile bag technique
modelling nutrient supply to dairy cattle from a feedstuff, 513
Mobile nylon bag technique
mobile nylon bag technique for cattle, 85
Model, **545**
protein supplementation of feedlot cattle diets, 377
Model evaluation, **546**
Modelling nutrient supply
modelling nutrient supply to dairy cattle from a feedstuff, 513
Moisture enhancement
semitendinosus injection treatments, 327
Monensin
monensin on meal frequency in dairy cows, 247
Multiple regression, **548**
Muscle fibre
gestational growth hormone-releasing factor treatment and pork carcass and meat quality, 37
Muscle protein synthesis, **549**
Mustela vison
behaviour of mink in the lactation period, 7

National Research Council
modelling nutrient supply to dairy cattle from a feedstuff, 513
Necrotic enteritis
amino acids and necrotic enteritis in broiler chickens, 185
Net energy
energy content in swine and poultry feed, 269
Nitrogen
lysine requirements of broilers, 195
nitrogen metabolism in steers, 107
Nitrogen-15
purines and ^{15}N as microbial markers, 211
Nursery pig performance
surface water for pigs, 405

Nutrition, **545**
energy content in swine and poultry feed, 269
Nutrition/health, animal
gastrointestinal microbiota in monogastrics, 421

Oilseed, full-fat
hemp seed for feedlot cattle, 223
Omasal sampling, **546**

Polymerase chain reaction
detection of feed-ingested plant DNA in meat, 541
Polymerase chain reaction-denaturing gradient gel electrophoresis
gastrointestinal microbiota in monogastrics, 421
Performance
non-toasted canola meal for swine, 53
Periparturient cow, **546**
PG-100
accuracy of backfat and muscle thickness measurements, 481
Phosphate injection
semitendinosus injection treatments, 327
Phosphorus, **550**
Phosphorus balance
P status of dairy cows, 409
Phosphorus requirement
P status of dairy cows, 409
Physiology
efficiency of feed utilization, 281
Pig, **547**
detection of feed-ingested plant DNA in meat, 541
lactitol and lactic acid bacteria in pigs, 345
mobile nylon bag technique for cattle, 85
non-toasted canola meal for swine, 53
rice bran in diets for growing pigs, 355
stocking rate in wean-to-finish, 1
subtherapeutic use of antibiotics in pork production, 117
surface water for pigs, 405
transport of early-weaned piglets, 449
urination frequency of pigs, 537
Pig, grower-finisher
urination frequency of pigs, 537
Pig nutrition, **548**
Polymorphism
variation and association analysis of *PSMC3, PSMC6* and *PSMD3,* 475
Polysaccharide
hydroxycinnamic acids, ferulic acid esterase and plant cell wall biodegradation, 255
Porcine
variation and association analysis of *PSMC3, PSMC6* and *PSMD3,* 475
Pork
accuracy of backfat and muscle thickness measurements, 481
Pork production
subtherapeutic use of antibiotics in pork production, 117
Prebiotics
lactitol and lactic acid bacteria in pigs, 345
Prediction models
predicting lean meat yield using alternate ultrasound measurements, 23
Pregnancy
prolactin and immunity in gravid gilts and foetuses, 335
Probiotics
lactitol and lactic acid bacteria in pigs, 345
Production
transport of early-weaned piglets, 449
wheat straw and middlings ensiled with whey, 69
Prolactin
prolactin and immunity in gravid gilts and foetuses, 335
Protein
corn gluten feed for feedlot cattle, 365
protein supplementation of feedlot cattle diets, 377
Protein nutritive value
protein secondary structures in flaxseeds, 437
Protein secondary structures
protein secondary structures in flaxseeds, 437
Protozoa generation time, **546**
PSMC3
variation and association analysis of *PSMC3, PSMC6* and *PSMD3,* 475
PSMC6
variation and association analysis of *PSMC3, PSMC6* and *PSMD3,* 475
PSMD3
variation and association analysis of *PSMC3, PSMC6* and *PSMD3,* 475
Purine derivative
purines and ^{15}N as microbial markers, 211

Reproductive performance
copper proteinate for sows, 205
Residual phytase activity
residual phytase activity in the digestive tract, 61
Resting heat production
cold-exposure on body temperature and heat production of cattle, 177
Reversed-phase high pressure liquid chromatography
mare milk proteins during lactation, 93
Rice bran
rice bran in diets for growing pigs, 355
16S rRNA
gastrointestinal microbiota in monogastrics, 421
Ruminal acidosis
monensin on meal frequency in dairy cows, 247
Ruminal fluid
B vitamins in ruminal fluid of dairy cows, 417
Ruminal fractions
B vitamins in ruminal fractions of dairy cows, 389
Ruminally inert fat
conjugated linolenic acid in dairy cows under commercial conditions, 231
Ruminant
oral anti-*E coli* 0157:H7 antibodies for sheep, 291

Season
seasonality of reproduction in sows, 317
Selenium
selenium determination in biological samples, 533
Semitendinosus, beef
semitendinosus injection treatments, 327
Sheep, **550**
oral anti-*E. coli* 0157:H7 antibodies for sheep, 291
Shelter
responses of horses to winter climate, 301
Silage, alfalfa
replacing chopped hay with silage in total mixed rations, 251
Snell score
comparison of models evaluating calving ease, 145

Sow
copper proteinate for sows, 205
prolactin and immunity in gravid gilts and foetuses, 335
seasonality of reproduction in sows, 317
Soybean
nitrogen metabolism in steers, 107
Stayability
Angus cattle stayability and growth, 139
Steer
efficacy of Alfasure™ in treating bloat in cattle, 111
nitrogen metabolism in steers, 107
Stochastic, **547**
Stocking rate
stocking rate in wean-to-finish, 1
Subtherapeutic antibiotics
subtherapeutic use of antibiotics in pork production, 117
Sunflower seed
sunflower seeds increase conjugated linoleic acid content of milk, 75
Surface water
surface water for pigs, 405
Swine
lactitol and lactic acid bacteria in pigs, 345
Synbiotics
lactitol and lactic acid bacteria in pigs, 345
Synchrotron
protein secondary structures in flaxseeds, 437
Synthetic strain
evaluation of geese, 455

Temperature
transport of early-weaned piglets, 449
Tenderness, beef, **550**, **551**
anionic salts and vitamin D_3 on Ca homeostasis, 521
Thyroid hormone
responses of horses to winter climate, 301
Tissue fatty acids
hemp seed for feedlot cattle, 223
Toasting
non-toasted canola meal for swine, 53
Transport
transport of early-weaned piglets, 449
Tyrosine, **549**

Uncoupling protein-2
bovine messenger ribonucleic acid abundance, 157
Uncoupling protein-3
bovine messenger ribonucleic acid abundance, 157
Ultrasound
genetic correlations among beef carcass indicator traits, 463
predicting lean meat yield using alternate ultrasound measurements, 23
Urination
urination frequency of pigs, 537

Vaginal temperature
cold-exposure on body temperature and heat production of cattle, 177
Variability, **547**
Vitamin B
B vitamins in ruminal fluid of dairy cows, 417
B vitamins in ruminal fractions of dairy cows, 389
Vitamin D_3
anionic salts and vitamin D_3 on Ca homeostasis, 521

Water
surface water for pigs, 405
Wean to first service interval
seasonality of reproduction in sows, 317
Weaning
behaviour of mink in the lactation period, 7
stocking rate in wean-to-finish, 1
Weaning, early
transport of early-weaned piglets, 449
Welfare
behaviour of mink in the lactation period, 7
responses of horses to winter climate, 301
Well water
surface water for pigs, 405
Wheat
broilers fed maritime wheat, 493
Whey protein distribution
mare milk proteins during lactation, 93
Whey silage
wheat straw and middlings ensiled with whey, 69
Winter climate
responses of horses to winter climate, 301

Zona binding
in vitro tests and bull fertility, 47